

# ● PRINTER RUSH ●

## (PTO ASSISTANCE)

|                                    |                              |                          |
|------------------------------------|------------------------------|--------------------------|
| Application : <u>10/652,586</u>    | Examiner : <u>Hook</u>       | GAU : <u>3752</u>        |
| From: <u>NPB</u>                   | Location: <u>IDC</u> FMF FDC | Date: <u>11/13/04</u>    |
| IFW(E) Tracking #: <u>06006782</u> |                              | Week Date: <u>9/6/04</u> |

| DOC CODE                      | DOC DATE | MISCELLANEOUS<br><i>(bib/specs)</i>                 |
|-------------------------------|----------|---|
| <input type="checkbox"/> 1449 | _____    | <input checked="" type="checkbox"/> Continuing Data |
| <input type="checkbox"/> IDS  | _____    | <input type="checkbox"/> Foreign Priority           |
| <input type="checkbox"/> CLM  | _____    | <input type="checkbox"/> Document Legibility        |
| <input type="checkbox"/> IIFW | _____    | <input type="checkbox"/> Fees                       |
| <input type="checkbox"/> SRFW | _____    | <input type="checkbox"/> Other                      |
| <input type="checkbox"/> DRW  | _____    |   |
| <input type="checkbox"/> OATH | _____    |   |
| <input type="checkbox"/> 312  | _____    |   |
| <input type="checkbox"/> SPEC | _____    |   |

**[RUSH] MESSAGE:**

*Serial No. 10/454,742 is listed on palm/bib sheet under continuing data, but no relationship given.*

*If continuing data, please amend bib sheet and specification showing the relationship of Serial No. 10/454,742 (CON, DN or CIP).*

*Thankyou* *mm.*

**[XRUSH] RESPONSE:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**INITIALS:**

NOTE: This form will be included as part of the official USPTO record, with the Response document coded as XRUSH.  
REV 10/04



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

## \*BIBDATASHEET\*

Bib Data Sheet

CONFIRMATION NO. 9136

BEST AVAILABLE COPY

|                             |                                       |              |                        |  |
|-----------------------------|---------------------------------------|--------------|------------------------|--|
| SERIAL NUMBER<br>10/652,586 | FILING DATE<br>08/29/2003<br><br>RULE | CLASS<br>138 | GROUP ART UNIT<br>3752 | ATTORNEY<br>DOCKET NO.<br>2267.854US01 |
|-----------------------------|---------------------------------------|--------------|------------------------|--|

## APPLICANTS

Charles W. Extrand, Minneapolis, MN;

Michael Wright, Greenwood, MN;

## \*\* CONTINUING DATA \*\*

This appln claims benefit of 60/462,963 04/15/2003

10/454,742 6/03/2003

→ CON. DIV of OP?  
JH

## \*\* FOREIGN APPLICATIONS \*\*

none JH

## IF REQUIRED, FOREIGN FILING LICENSE GRANTED

\*\* 11/20/2003

|   |                              |   |                       |                            |
|---|------------------------------|---|-----------------------|----------------------------|
| Foreign Priority claimed<br><input type="checkbox"/> yes <input checked="" type="checkbox"/> no   | STATE OR<br>COUNTRY<br>MN    | SHEETS<br>DRAWING<br>8                              | TOTAL<br>CLAIMS<br>26 | INDEPENDENT<br>CLAIMS<br>3 |
| 35 USC 119 (a-d) conditions<br>met<br><input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after<br>Allowance | Verified and<br>Acknowledged | Examiner's Signature<br><i>James H. [Signature]</i> | Initials              |                            |

## ADDRESS

24113

PATTERSON, THUENTE, SKAAR &amp; CHRISTENSEN, P.A.

4800 IDS CENTER

80 SOUTH 8TH STREET

MINNEAPOLIS, MN

55402-2100

## TITLE

Microfluidic device with ultraphobic surfaces

|            |   |  |
|------------|---|--|
| FILING FEE | FEES: Authority has been given in Paper<br>No. _____ to charge/credit DEPOSIT ACCOUNT | <input type="checkbox"/> All Fees                              |
| RECEIVED   | No. _____ for following:  | <input type="checkbox"/> 1.16 Fees ( Filing )                  |
|            |   | <input type="checkbox"/> 1.17 Fees ( Processing Ext. of time ) |
|            |   | <input type="checkbox"/> 1.18 Fees ( Issue )                   |

## MICROFLUIDIC DEVICE WITH ULTRAPHOBIC SURFACES

### RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Patent Application Serial No. 60/462963, entitled "Ultraphobic Surface for High Pressure Liquids", filed April 15, 2003, hereby fully incorporated herein by reference. This application further claims the benefit of U.S. Utility Patent Application Serial No. 10/454,742 entitled "Fluid Handling Component With Ultraphobic Surfaces", filed June 3, 2003, also hereby fully incorporated herein by reference.

*CON, DN OR CIP?*

### FIELD OF THE INVENTION

This invention relates generally to microfluidic devices, and more specifically to a microfluidic device having ultraphobic fluid contact surfaces.

### BACKGROUND OF THE INVENTION

There has been much recent interest and effort directed to developing and using microfluidic devices. Microfluidic devices have already found useful application in printing devices and in so-called "lab-on-a-chip" devices, wherein complex chemical and biochemical reactions are carried out in microfluidic devices. The very small volumes of liquid needed for reactions in such a system enables increased reaction response time, low sample volume, and reduced reagent cost. It is anticipated that a myriad of further applications will become evident as the technology is refined and developed.